

**AMENDMENTS TO THE CLAIMS:**

Please amend claim 8 as indicated below. This listing of claims will replace all prior versions and listings of claims in the application:

**LISTING OF CLAIMS:**

1. (Original) A photomask comprising:

a substrate;

a translucent film selectively formed on the substrate; and

a shading film selectively formed on the translucent film, wherein

when the substrate, the translucent film and the shading film have Young's moduli (MPa)  $E_0$ ,  $E_1$  and  $E_2$ , and film thickness (m)  $d_0$ ,  $d_1$  and  $d_2$  respectively, internal stresses (MPa) of the translucent film and the shading film at room temperature are  $s_1$  and  $s_2$  respectively, a covering rate by the translucent film defined by an area in which the shading film is not formed is expressed as  $h$ , and coefficients are expressed as  $k_1 = 1.3 \times 10^{-8}$ ,  $k_2 = -9.5 \times 10^{-2}$ ,  $k_3 = 6.0 \times 10^{-7}$ , and  $k_4 = -5.2 \times 10^{-2}$  respectively, the substrate, the translucent film and the shading film satisfy a condition given by the following expression:

$$\left| \frac{1}{E_0 \cdot d_0} \cdot \left\{ h \cdot \left( k_1 \cdot \frac{S_1}{E_1 \cdot d_1} + k_2 \right) + \left( k_3 \cdot \frac{S_2}{E_2 \cdot d_2} + k_4 \right) \right\} \right|$$
$$\leq 1.4 \times 10^{-4} (m^{-1})$$

2. (Original) A photomask according to claim 1, wherein the internal stress of the shading film at room temperature is in the range of 500 MPa to 5 GPa.

3. (Original) A photomask according to claim 1, wherein the substrate, the translucent film and the shading film satisfy a condition given by the following expression:

$$\left| \frac{1}{E_0 \cdot d_0} \cdot \left\{ h \cdot \left( k_1 \cdot \frac{S_1}{E_1 \cdot d_1} + k_2 \right) + \left( k_3 \cdot \frac{S_2}{E_2 \cdot d_2} + k_4 \right) \right\} \right| \leq 0.87 \times 10^{-4} (m^{-1})$$

4. (Original) A photomask according to claim 3, wherein the internal stress of the shading film at room temperature is in the range of 1 GPa to 4.5 GPa.

5. (Original) A photomask according to claim 1, wherein the covering rate h is  $100\% > h \geq 30\%$ .

6. (Original) A photomask according to claim 1, wherein the substrate, the translucent film and the shading film are made of quartz, MoSiON and Cr, respectively.

7. (Original) A photomask according to claim 1, wherein a first phase of light that passes through a first area in which the translucent film and the shading film are not formed differs from a second phase of light that passes through a second area in which the translucent film is formed.

8. (Currently Amended) A method of manufacturing a photomask comprising:  
forming a translucent film and a shading film sequentially onto a surface of a substrate;  
measuring an internal stress in each of the translucent film and the shading film;  
determining whether or not a following expression is satisfied when the substrate, the translucent film and the shading film have Young's moduli (MPa)  $E_0$ ,  $E_1$ , and  $E_2$ , and film thickness (m)  $d_0$ ,  $d_1$ , and  $d_2$  respectively, internal stresses (MPa) of the translucent film and the shading film at room temperature are  $s_1$  and  $s_2$  respectively, a virtual covering rate by the translucent film after mask pattern formation defined by an area in which the shading film is not formed is expressed as  $h$ , coefficients are expressed as  $k_1 = 1.3 \times 10^{-8}$ ,  $k_2 = -9.5 \times 10^{-2}$ ,  $k_3 = 6.0 \times 10^{-7}$ , and  $k_4 = -5.2 \times 10^{-2}$  respectively, and a predicted warping amount for a desired photomask after the mask pattern formation is defined as  $A$  ( $m^{-1}$ ); and

$$\left| \frac{1}{E_0 \cdot d_0} \cdot \left\{ h \cdot \left( k_1 \cdot \frac{S_1}{E_1 \cdot d_1} + k_2 \right) + \left( k_3 \cdot \frac{S_2}{E_2 \cdot d_2} + k_4 \right) \right\} \right| \leq A(m^{-1})$$

removing the translucent film and the shading film selectively to be the covering rate  $h$  that satisfy the expression based on a result of the determining ~~determination result~~.

9. (Original) A method of manufacturing a photomask according to claim 8, wherein the predicted warping amount  $A$  is  $1.4 \times 10^{-4}$  ( $m^{-1}$ ).

10. (Original) A method of manufacturing a photomask according to claim 9, wherein the internal stress of the shading film at room temperature is in the range of 500 MPa to 5 GPa.

11. (Original) A method of manufacturing a photomask according to claim 8, wherein the predicted warping amount A is  $0.87 \times 10^{-4}(\text{m}^{-1})$ .

12. (Original) A method of manufacturing a photomask according to claim 11, wherein the internal stress of the shading film at room temperature is in the range of 1 GPa to 4.5 GPa.

13. (Original) A method of manufacturing a photomask according to claim 8, wherein the virtual covering rate h is  $100\% > h \geq 30\%$ .

14. (Original) A method of manufacturing a photomask according to claim 8, wherein a first phase of light that passes through a first area in which the translucent film and the shading film are not formed differs from a second phase of light that passes through a second area in which the translucent film is formed.

15. (Original) A method of manufacturing an electronic product comprising:  
forming a photoresist on a substrate to be processed;  
passing light through a photomask having a mask pattern that has a substrate, a translucent film selectively formed on the substrate and a shading film selectively formed on the translucent film to transfer the mask pattern onto the photoresist; wherein when the substrate, the

translucent film and the shading film have Young's moduli (MPa)  $E_0$ ,  $E_1$  and  $E_2$ , and film thickness (m)  $d_0$ ,  $d_1$  and  $d_2$  respectively, internal stresses (MPa) of the translucent film and the shading film at room temperature are  $s_1$  and  $s_2$  respectively, a covering rate by the translucent film defined by an area in which the shading film is not formed is expressed as  $h$ , and coefficients are expressed as  $k_1 = 1.3 \times 10^{-8}$ ,  $k_2 = -9.5 \times 10^{-2}$ ,  $k_3 = 6.0 \times 10^{-7}$ , and  $k_4 = -5.2 \times 10^{-2}$  respectively, the substrate, the translucent film and the shading film satisfy a condition given by the following expression:

$$\left| \frac{1}{E_0 \cdot d_0} \cdot \left\{ h \cdot \left( k_1 \cdot \frac{S_1}{E_1 \cdot d_1} + k_2 \right) + \left( k_3 \cdot \frac{S_2}{E_2 \cdot d_2} + k_4 \right) \right\} \right| \leq 1.4 \times 10^{-4} (m^{-1})$$

developing the photoresist; and

selectively processing the substrate to be processed using the photoresist as a mask.

16. (Original) A method of manufacturing an electronic product according to claim 15, wherein the internal stress of the shading film at room temperature is in the range of 500 MPa to 5 GPa.

17. (Original) A method of manufacturing an electronic product according to claim 15, wherein the substrate, the translucent film and the shading film satisfy a condition given by the following expression:

$$\left| \frac{1}{E_0 \cdot d_0} \cdot \left\{ h \cdot \left( k_1 \cdot \frac{S_1}{E_1 \cdot d_1} + k_2 \right) + \left( k_3 \cdot \frac{S_2}{E_2 \cdot d_2} + k_4 \right) \right\} \right|$$

$$\leq 0.87 \times 10^{-4} (m^{-1})$$

18. (Original) A method of manufacturing an electronic product according to claim 17, wherein the internal stress of the shading film at room temperature is in the range of 1 GPa to 4.5 GPa.

19. (Original) A method of manufacturing an electronic product according to claim 15, wherein the covering rate h is  $100\% > h \geq 30\%$ .

20. (Original) A method of manufacturing an electronic product according to claim 15, wherein a first phase of light that passes through a first area in which the translucent film and the shading film are not formed differs from a second phase of light that passes through a second area in which the translucent film is formed.